



**CLINICO-SOCIAL PROFILE OF THE PATIENTS WITH CERVICAL CARCINOMA:  
EXPERIENCE FROM A TERTIARY CARE HOSPITAL IN KOLKATA**

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**ABSTRACT**

**Introduction:** cervical cancer is one of the most common cancer in women especially in India. Radiotherapy with or without chemotherapy and/or surgery is the main treatment modality. Current study explored the clinical and social aspects of the patients along with their outcomes.

**Materials and Methods:** Socio-demographic and clinical profile as well as treatment outcome of the study subjects were obtained from the records. They were analyzed and results are mentioned with the help of tables and diagrams.

**Results:** Most of the cervical cancer patients were of the age 40-60 years with locally advanced carcinoma. Patients in majority received radiotherapy with or without chemotherapy and/or surgery. External beam radiotherapy and brachytherapy was the most common modality of therapy. Patients mostly completed their treatment.

**Discussion:** Most of our results were in concordance with other international findings, since most of cervical cancer patients are middle-aged female with locally advanced carcinoma receiving radiotherapy with or without chemotherapy and/or surgery.

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**INTRODUCTION**

Cervical cancer is the fourth most common cancer in women and the seventh overall, with an estimated 528000 new cases in 2012. A large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers.<sup>(1)</sup>

Every year in India, 122,844 women are diagnosed with cervical cancer and 67,477 die from the disease. India has a population of 432.2 million women aged 15 years and older who are at risk of developing cancer. It is the second most common cancer in women aged 15-44 years. India also has the highest age standardized incidence of cervical cancer in South Asia at 22.<sup>(2)</sup>

Risk factors for developing cervical cancer are Human Papilloma Virus, immune-deficiency, genital herpes, smoking, use of OCP and exposure to diethylstilbestrol.<sup>(3)</sup> Patients complain of metrorrhagia, menorrhagia or post-coital bleeding and in case of chronic bleeding, fatigue and other symptoms related to anemia.<sup>(4)</sup> Combined modality treatment is usually the preferred mode with radiotherapy being the mainstay of treatment.<sup>(4, 5)</sup>

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The current study was conducted with an aim to determine the social and clinical profiles and outcomes of patient suffering from cervical cancer among the patients attending a tertiary care OPD of Kolkata.

**MATERIALS AND METHODS**

A record-based descriptive study was conducted at the Radiotherapy Department, Medical College, Kolkata during the months of November & December, 2017. Several patient records available in the department were reviewed by census method based on pre-decided inclusion and exclusion criteria. Records of patients attending Radiotherapy OPD, Medical College, Kolkata from 1<sup>st</sup> January, 2012; with histologically proven cervical carcinoma were considered. However previously irradiated patients for other malignancy/other reason, patients with primary melanoma metastases from other area(s) and patients who attended the OPD after 31<sup>st</sup> December 2016 were excluded from this study. This resulted in 94 records to be considered. Data was collected and compiled for these 94 records. Data was collected regarding different socio-demographic variables, variables related to general clinical profile, radiotherapy related variables decided beforehand. The collected data was compiled into EpiInfo 7 software and subsequently analysis of data was done using SPSS software, version 16.

**RESULTS**

The socio-clinical information of the patients attending the Radiotherapy clinic with cervical carcinoma has been presented in Table 1. Among the 94 patients with cervical carcinoma minimum age was 30 years with maximum 70 years. Mean age was found to be 49.4 years (± 8.9 years). Among these patients 48.9% were aged below mean age, however remaining 51.1% were aged mean or more. Majority were Hindu (91.5%). While 85.1% were married, remaining were never married. Most of them were housewife (98.9%). Majority had diagnosed hypertension (38.3%).

**Table 1** Socio-clinical distribution of the patients with cervical carcinoma. (n=94)

		Frequency	Percentage
Age	Below mean	46	48.9
	Mean and above	48	51.1
Religion	Hinduism	86	91.5
	Islam	8	8.5
Marital Status	Ever married	80	85.1
	Never married	14	14.9
Occupation	Housewife	93	98.9
	Other	1	1.1
Co-morbidities	Diabetes Mellitus	5	5.3
	Hypertension	36	38.3
	Ischaemic Heart Disease	1	1.1

The clinical statuses of cervical carcinoma among the patients are described in Table 2.

**Table 2** Distribution of patients according to clinical status of the disease. (n=94)

		Frequency	Percentage
Presentation	Local	20	21.3
	Locally advanced	73	77.7
	Advanced	1	1.1
Confirmation of malignancy	Biopsy	65	69.1
	Surgical specimen	29	30.9
Grade	Well differentiated	52	55.3
	Moderately differentiated	40	42.6
Metastasis	Poorly differentiated	2	2.1
	Metastasis present	10	10.6
	No metastasis	84	89.4
Stage of carcinoma	I	7	7.4
	II	53	56.4
	III	31	33.0
	IV	3	3.2

Majority presented with locally advanced carcinoma (77.7%). Around 69.1% of the patients were diagnosed of the disease with the help of biopsy. On histopathological examination all of them were found to be small cell carcinoma. Distant metastasis was found in 10.6% of the patients. Majority had a well differentiated carcinoma (55.3%) while only 2.1% had poorly differentiated carcinoma. About 56.4% were diagnosed with stage II carcinoma, 33.0% with stage III, 7.4% had stage I disease while remaining 3.2% had stage IV disease.

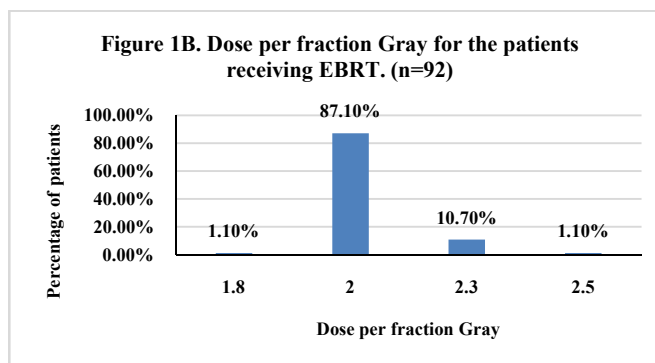
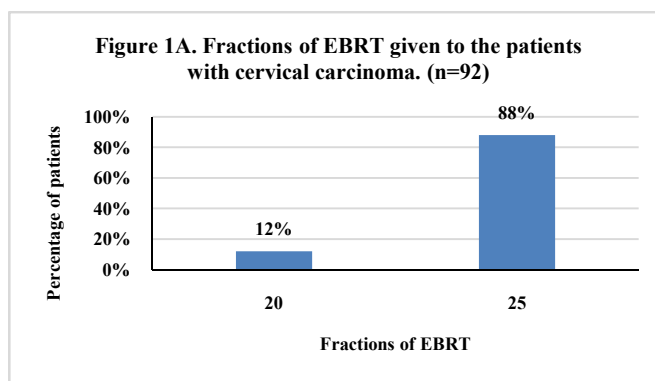
All the 94 patients received radiotherapy. Table 3 describes the different aspects of treatment. All the patients completed their treatment. None of them died during treatment or left without completing the treatment. Most of them were given radiotherapy with curative intent (97.9%). Among all the patients 4.2% completed EBRT, while 93.7% did not complete EBRT. Among those who were given EBRT 78.7% received conventional EBRT, 16.0% received hypo-fractionated EBRT and the rest received hyper-fractionated EBRT. Among the patients 96.8% were given brachytherapy. Among these

patients i.e. those given brachytherapy 93.6% were given brachytherapy after EBRT.

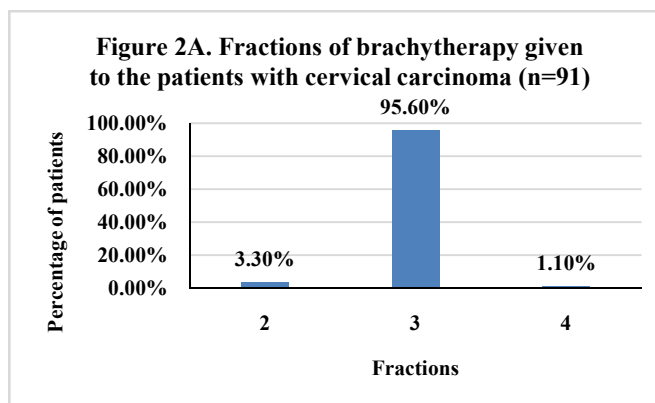
**Table 3** Distribution of the patients according to treatment with radiotherapy

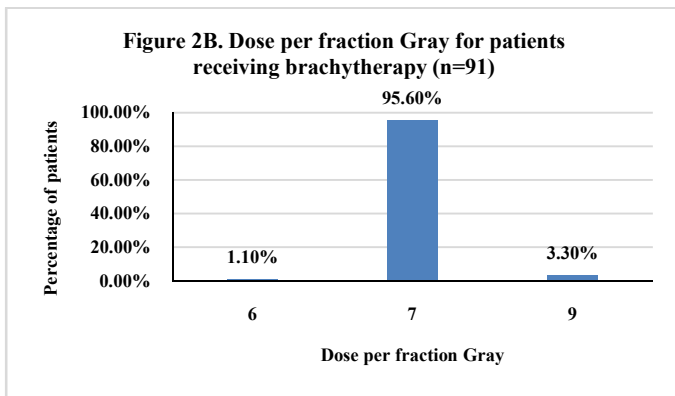
		Frequency	Percentage
Intent of Radio therapy (n=94)	Curative	92	97.9
	Palliative	2	2.1
	Completed	4	4.2
EBRT (n=94)	Given but not completed	88	93.7
	Not Given	2	2.1
	Conventional	74	78.7
Type of EBRT (n=92)	Hyper-fractionated	3	1.1
	Hypo-fractionated	15	16.0
Brachytherapy (n=94)	Given	91	96.8
	Not given	3	3.2
Timing of Brachytherapy (n=91)	Before EBRT	3	3.2
	After EBRT	88	93.6

Dosage of EBRT has been summarized in Figures 1A & 1B. While 88.0% of the patients received 25 fractions, rest 12.0% received 20 fractions.



Majority received 2 dose per fraction Gray (87.10%). Dosage related information regarding brachytherapy is depicted in Figures 2A & 2B.





Most (95.60%) of the patients who received brachytherapy received 3 fractions. Among these patients who received brachytherapy 95.60% received 7 dose per fraction Gray.

## DISCUSSION

In our study the mean age is 44 years ( $\pm 8.9$  years). In studies it is usually 55-59 years<sup>(2)</sup>. In our study most presentation was from locally advanced (77%) and local (21.3%) similar to the prevailing trend<sup>(6)</sup>. All the patient received external beam radiotherapy, mostly with curative intent (97.9%). Most of the patients also received brachytherapy (96.8%). This is in concordance with existing data.<sup>(4,5)</sup>

The present study was a record- based study. Depending on the results, a longitudinal study can be undertaken in future primarily focusing on the treatment outcomes and survival pattern. Also data was collected in a census method. So we did not seek any statistical association among different variables. Since it is difficult to pursue a similar study in a community-based manner, we decided to stick to a OPD-based (record-based method). However a longitudinal study in a similar setting can be undertaken.

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